

12. (Amended) A program storage device, readable by a programmable control device, comprising instructions for causing the programmable control device to:

- obtain memory configuration information of a computer system, the computer system including memory devices;
- determine a memory capacity for the computer system; and
- determine memory upgrade options to expand the number of the memory devices based on a residual memory capacity of the computer system.

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A3 18. (Amended) A computer system comprising:

- a processor;
- system memory coupled to the processor, the system memory having one or more memory modules and a memory configuration, wherein the memory modules include one or more memory devices; and
- a configuration routine including instructions to obtain memory configuration information, determine a memory capacity of the computer system, and determine memory upgrade options to expand the number of the memory modules based on a residual memory capacity.

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Add the following new claims:

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A4 21. (New) A method comprising:

- obtaining memory configuration information of a computer system, the computer system including memory devices;
- determining a memory capacity of the computer system; and
- determining memory upgrade options to replace at least one of the memory devices based on a residual memory capacity of the computer system.

22. (New) The method of claim 21, wherein the act of obtaining memory configuration information comprises obtaining an indication of an installed system memory amount.

23. (New) The method of claim 22, wherein the memory configuration information further comprises a number of memory module sockets.

24. (New) The method of claim 22, wherein the memory configuration information further comprises an operating speed of the installed system memory.

25. (New) The method of claim 21, wherein the act of obtaining memory configuration information comprises accessing a non-volatile storage device.

26. (New) The method of claim 25, wherein the act of accessing a non-volatile storage device comprises accessing a serial presence detect device.

27. (New) The method of claim 21, wherein the act of obtaining memory configuration information comprises obtaining information from one or more dynamic random access memory devices.

28. (New) The method of claim 21, wherein the act of determining a memory capacity comprises obtaining an indication of a maximum number of memory devices for the computer system.

29. (New) The method of claim 21, wherein the act of determining a memory capacity comprises obtaining an indication of a maximum amount of memory for the computer system.

30. (New) The method of claim 21, wherein the act of determining a memory capacity comprises obtaining an indication of a maximum number of memory module sockets for the computer system.

31. (New) The method of claim 21, further comprising providing memory upgrade options to a user.

32. (New) A program storage device, readable by a programmable control device, comprising instructions for causing the programmable control device to:

obtain memory configuration information of a computer system, the computer system including memory devices;

determine a memory capacity for the computer system; and

determine memory upgrade options to replace one or more the memory devices based on a residual memory capacity of the computer system.

33. (New) The program storage device of claim 32, wherein the instructions to obtain memory configuration information comprise instructions to obtain an indication of an installed system memory amount.

34. (New) The program storage device of claim 33, wherein the memory configuration information further comprises a number of memory module sockets.

35. (New) The program storage device of claim 33, wherein the instructions to obtain memory configuration information further comprise instructions to obtain an indication of a number of memory module slots available to the programmable control device.

36. (New) The program storage device of claim 32, wherein the instructions to obtain memory configuration information comprises instructions to access a non-volatile storage device.

37. (New) The program storage device of claim 32, wherein instructions to determine a memory capacity comprise instructions to obtain an indication of a maximum number of memory devices for the computer system.

38. (New) A computer system comprising:

a processor;

system memory coupled to the processor, the system memory having one or more memory modules and a memory configuration, wherein the memory modules include one or more memory devices; and

a configuration routine including instructions to obtain memory configuration information, determine a memory capacity of the computer system, and determine memory upgrade options to replace one or more of the memory modules based on a residual memory capacity.

39. (New) The computer system of claim 38, wherein the instructions to obtain memory configuration information comprise instructions to obtain indications of installed memory devices.

40. (New) The computer system of claim 38, wherein the instructions to determine a memory capacity comprise instructions to obtain an indication of a maximum amount of memory for the computer system.

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